Wardour Africa

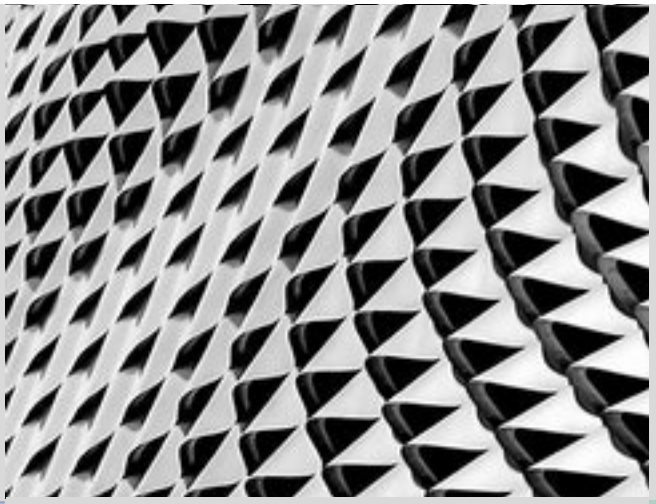
UKGCC
UK - GHANA CHAMBER of COMMERCE

# Project Finance

# Todays Objectives

2

Explain why Project Finance is a solution for financing infrastructure and where it is not suitable and typical structures

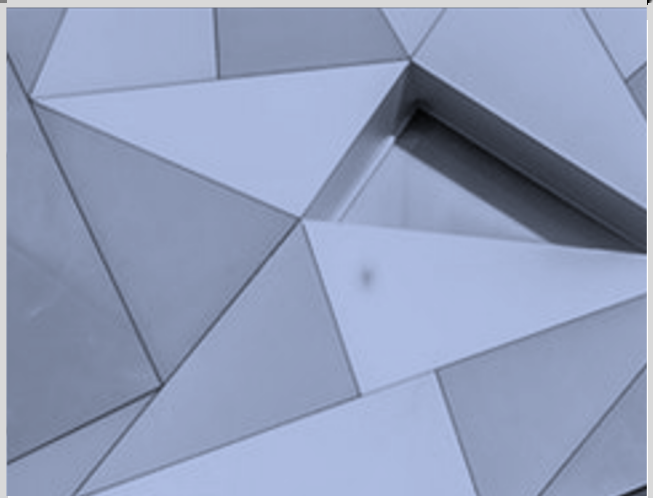


4

Key to project success and reasons for project failure

1

Outline the different types of finance sources for infrastructure projects



3

Explain the basic principles of risk and risk allocation in infrastructure projects

# Ghana Infrastructure Plan to 2047 Sectors Overview

## ICT

- ICT infrastructure provision requires huge capital expenditure for initial setup and maintenance.
- The global trend for alternative funding besides government sources include: Public Private Partnership (PPP), Loans, Private Equity (PE) and Universal Service Fund (USF). Among these sources, PPP remains the most popular option.
- Seeking 100% internet penetration rate by 2047

## TRANSPORTATION

- Total Investment $331 bn.
- Road network expanded by 3.5x to 253,00km
- Expansion of airports to the regions
- Additional expansions at Tema and Takoradi Port and on the Volta Lake
- Deliver 4000km of standard gauge railway network
- Sub-urban transport systems incl railway

## WATER & DRAINAGE

- Total Investment required $128.8bn
- New water required 48bnm3 by 2047, focus on water resource management
- 204 new Peri-urban systems planned and upgrade on 171 systems. 7 new urban water systems plans and upgrade on 42 systems.
- Irrigation systems required to cover 823,000 hectares of farm land.

## WASTE MANAGEMENT

- Total investment required $17.6bn
- Increase access to solid waste collection services to 100% of population from 50%
- Liquid waste investment focused mainly in urban areas 149,000km of urban sewers to be laid.

## HOUSING

- Total Investment required $900bn.
- 8.4 million houses required between 2018-2047.
- Develop local alternatives to inputs for the housing sector

## ENERGY

- Total investment required $168 bn
- Increase generating capacity to 50.2MW from 3.8MW currently.
- Focus on loss reduction technology

# Ghana's Infrastructure Financing Plans

## Government Funding

- Budget Allocation
- Development Partners

## Existing Infra Funding

- Ghana Infra Investment Fund
- Ghana Investment Fund for Electronic Communications
- Ghana Road Fund
- Ghana Cocoa Board Cocoa Roads Fund

## SOURCE AND USES OF FINANCING OF GHANA's INFRASTRUCTURE NEEDS TO 2047

| Sources | | Uses | |
|---|---|---|---|
| **Gains from Efficiencies** | 154.1 | **Energy** | **110.6** |
| **Gov Revenues to Infra** | | Renewable | 13.0 |
| GETFUND | 79.7 | Nuclear / Coal | 78.7 |
| ROAD FUND | 39.4 | Petroleum Sector | 9.6 |
| GIIF | 83.8 | Transmission | 4.8 |
| Property Tax | 275.9 | Distribution | 4.6 |
| GIFEC | | **Transport** | **220.7** |
| **Non-Tax** | | Roads | 299.1 |
| Police | | Railway | 22.0 |
| DVLA | 1.9 | Aviation | 4.6 |
| Tourism | 372.6 | Maritime Ports | 4.3 |
| Reduce Illicit flows | 311.4 | Inland Ports | 0.7 |
| Leverage Minerals | 4.6 | Inst Development | 4.6 |
| **Domestic Private Sec** | | **Water Systems** | **8.7** |
| Collective Investment | 0.1 | Water Management | 1.2 |
| Holding Gov Debt | | Water Supply | 7.6 |
| Pension Funds | 6.3 | **Waste Management** | **17.6** |
| **FDI** | 2.786.6 | Liquid Waste | 6.9 |
| **Donor funds** | 1.3 | Solid Waste | 10.6 |
| **DFI's** | | **Irrigation** | **4.3** |
| **BRIC's funds** | | **Drainage, Flood** | **42.7** |
| | | **Housing** | **900.0** |
| | | **Social Services** | **10.7** |
| | | **ICT** | **19.8** |
| **Total** | **4017.9** | **Total** | **1,114,4** |

Additional $237.4 bn for maintenance not captured above Housing represents approx. 77% of this figure

## Other Sources

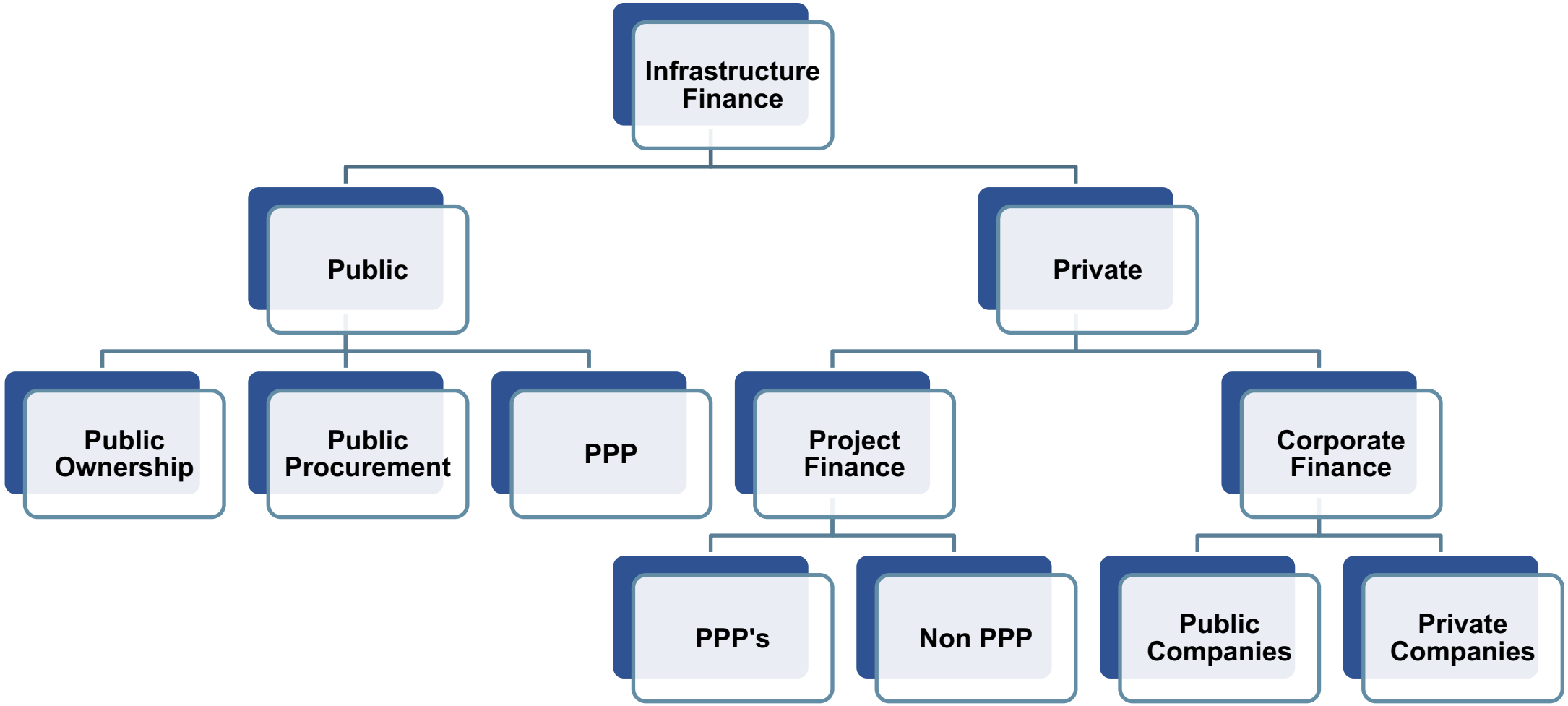
- Oil & Gas Revenues
- Reallocation of ABFA
- Stop Illicit Financial Flows
- Remittances
- Labor Export
- Domestic Savings
- Dealing with Corruption
- Reducing Import Exemptions
- PPP's
- Land Value Capture
- Expansion of Tax Revenue
- Developing Industries to provide additional revenue
- Value addition to minerals

Figures is US$ bn

UKGCC UK - GHANA CHAMBER of COMMERCE

Wardour Africa

# Financing of Infrastructure – what are the approaches?



# Why Project Finance

**There are many reasons why project financing is an attractive financing option:**

- ***Limited recourse to the sponsors***
    - Lender recourse is only to the project, its cash flows and contracts
    - Provides sponsors with increased ability to finance large capital projects
- ***Off-Balance sheet treatment***
    - Non-recourse debt often receives off-balance sheet treatment
    - Equity analysts often exclude project debt from gearing calculations of sponsor parent companies
- ***Leverage***
    - High leverage available
    - Long tenors available compared to corporate debt
    - Robust risk allocation reduces return requirement for debt investors
- ***Management of multi-sponsor issues***
    - Projects often too large for single sponsor
    - Mitigate exposure to other sponsors

# What is Project Finance?

**Project Finance raises funds for independent projects and allows for limited recourse to project sponsors.**

- ***Limited recourse financing***
    - Debt raised to finance the project is secured only by the project company's cashflows
    - The project is typically ring-fenced in a special purpose vehicle (the project company)
    - If the project is unable to meet its debt obligations, the lenders cannot pursue the sponsors for payment
        - Sponsors may need to provide some form of credit support until the asset is completed
        - Hence 'limited recourse' as opposed to 'non-recourse'
- ***Repayment based on project cashflows***
    - Project debt is serviced purely from project cashflow
    - Credit is driven by the project characteristics rather than the credit of the sponsors
- ***Project risks allocated to parties best able to manage or mitigate them***
    - Rigorous risk management built into the project structure
    - 'Web' of contractual arrangements to allocate the risks among project parties
    - Risks assigned to the project company may vary with specific industries, country and other factors

# Typical Project Financed by Project Finance Structures

**Industrials**

- Refineries/Petrochemicals
- Fertilisers
- Cement

**Power**

- IPPs
- Network


**Oil and Gas**

- Pipelines
- Gas/Oil field development

**Infrastructure**

- Toll roads
- Ports

**Telecoms**

- Mobile network

**Metals and Mining**

- Mine developments
- Aluminum smelters

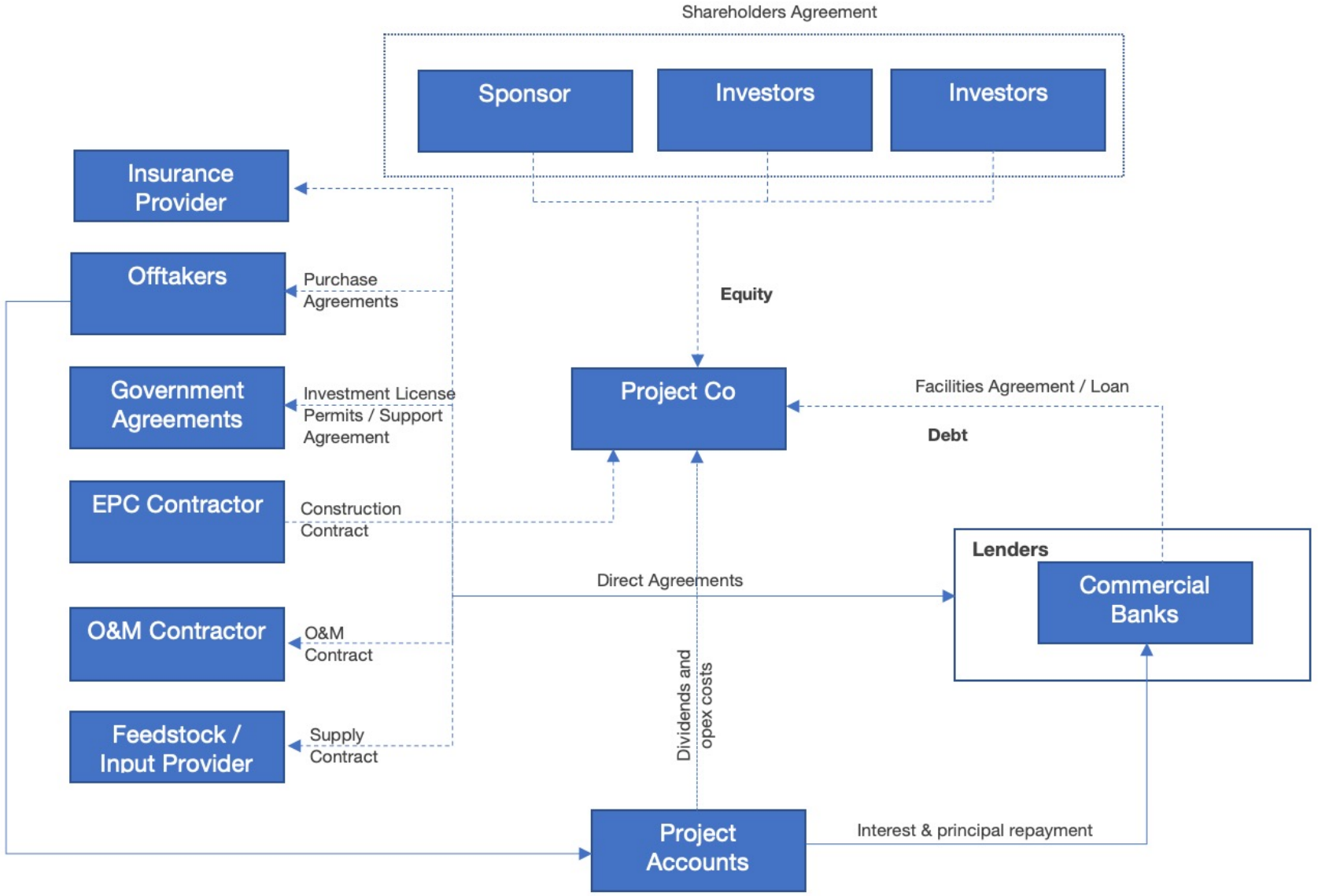
**Transportation**

- Rail


**Transportation**

- Liquefaction plants
- Regasification terminals
- Vessels

# Typical Project Finance Structure



# How does Project Finance differ from Corporate Finance?

| | Corporate Finance | Project Finance |
|---|---|---|
| **Borrower** | • Borrower is typically sponsor parent company<br>– Credit analysis of sponsor<br>– Driven by company accounts | • Borrower is special purpose project company<br>– Collateral is the project itself<br>– Cash flow is “king” |
| **Security** | • Charges over specific assets and assignment of contracts unnecessary | • Fixed and floating charges over project assets<br>• Security over sponsors’ shares in the project company<br>• Security over project accounts<br>• Assignment of material contracts |
| **Revenue Flow** | • All revenues are paid directly into corporate accounts | • Revenue is paid into project accounts<br>• Cash flows cascade through a ‘cash waterfall’ of accounts to meet costs, debt service and reserves before it can be released to sponsors |
| **Covenants** | • Negative pledge and standard corporate covenants | • Maintenance of debt service and loan life cover ratios<br>• Significant information requirement: Construction and operating reports, regular financial updates<br>• No additional indebtedness |
| **Distributions to Sponsors** | • No restrictions barring a default at sponsor (parent company) level | • Distributions allowed, subject to<br>– Completion<br>– Required reserve accounts filled<br>– Maintenance of cover ratios<br>– No events of default |

# When is Project Finance not Appropriate

**Project financing is not always the most appropriate form of financing!**

- Small value projects – normally no less than $40m as the cost of preparation is high and may make small projects non viable from a financial returns perspective
- Asset viewed as too strategically important to allow lenders to enforce security over it
- Financing process more complex and requires more management time
- Covenants and reporting requirements under financing documentation reduce operational flexibility
- Financial engineering benefits not attainable in all circumstances
- Depending on final risk allocation, structured finance debt can be more expensive than corporate debt

# What is Risk and What is Unknowns?

***"As we know,***

***there are known knowns; there are things we know we know.***

***We also know there are known unknowns; that is to say we know there are some things we do not know.***

***But there are also unknown unknowns—the ones we don't know we don't know."***

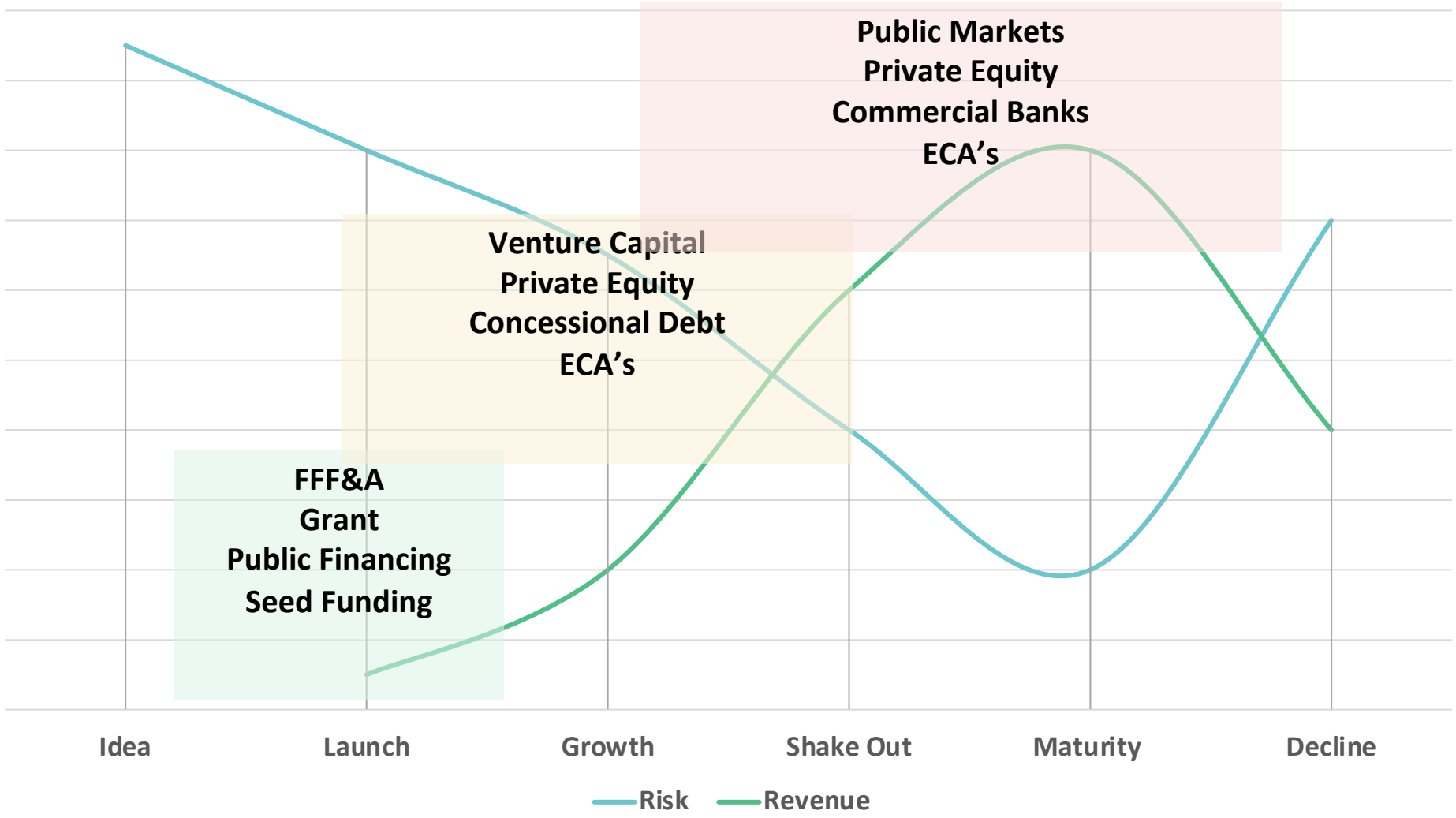
**<u>What is a Risk?</u>**

- Uncertain or chance events that planning not overcome or control
- Possibility or probability that the project will not turn out as planned or desired
- The combination of the probability of an event and its consequences
- Effect of uncertainty on objectives

**<u>Measuring Risk involves two concepts</u>**

- The likelihood that some event will occur
- The impact of the event if it does occur

# Risk Over Time for Projects




Different times in a project attract different capital due to the different risk profile

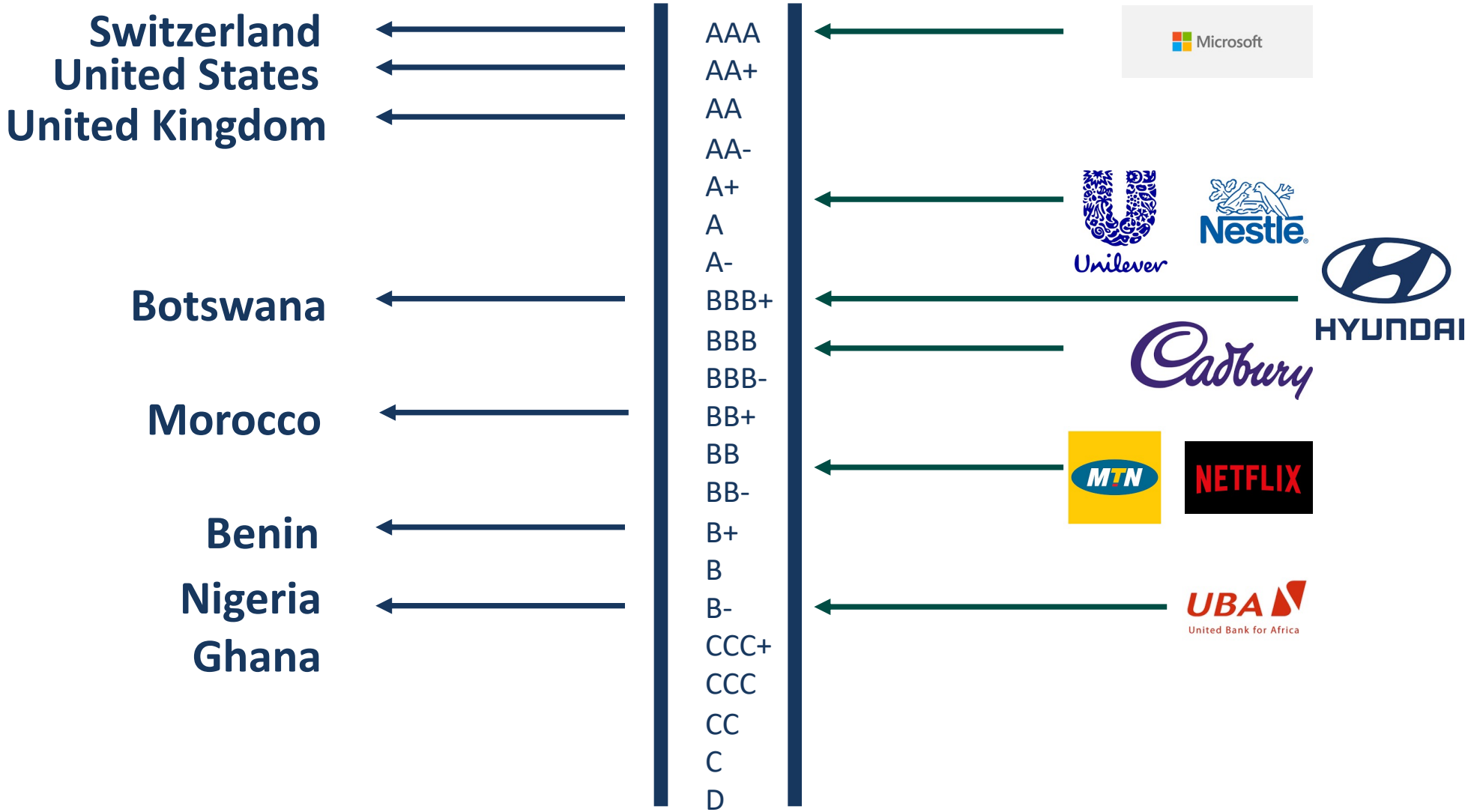
# How do we classify risk quality in finance?

| | Moody's Investors Service | Fitch Ratings | S&P Global Ratings | Rating Grade Description |
|---|---|---|---|---|
| Investment Grade | Aaa | AAA | AAA | Highest credit quality, lowest level of credit risk |
| | Aa1<br>Aa2<br>Aa3 | AA+<br>AA<br>AA- | AA+<br>AA<br>AA- | Very high credit quality with very low credit risk |
| | A1<br>A2<br>A3 | A+<br>A<br>A- | A+<br>A<br>A- | High credit quality with low credit risk |
| | Baa1<br>Baa2<br>Baa3 | BBB+<br>BBB<br>BBB- | BBB+<br>BBB<br>BBB- | Good credit quality with moderate credit risk |
| Speculative Grade | Ba1<br>Ba2<br>Ba3 | BB+<br>BB<br>BB- | BB+<br>BB<br>BB- | Speculative with substantial credit risk |
| | B1<br>B2<br>B3 | B+<br>B<br>B- | B+<br>B<br>B- | Highly speculative with high credit risk |
| | Caa1<br>Caa2<br>Caa3 | CCC+<br>CCC<br>CCC- | CCC+<br>CCC<br>CCC- | Substantial credit risk with default as a real possibility |
| | Ca | CC | CC | Very high levels of credit risk with default either occurring or about to occur |
| | C | C | C | Default or default-like process has begun |
| | | SD | RD | Selective Default (SD): Issuers have defaulted on one or more specific issues but are expected to meet their other payment obligations.<br>Restricted Default (RD): Issuers have missed one or more payments but are not under supervision for reorganization or liquidation. |
| | | D | D | Default: Issuers are unlikely to pay their obligations and have likely entered into bankruptcy filings, administration, receivership, liquidation or other formal winding-up procedures. |

Underlying risk in financing projects is expressed by way of a credit rating

This represents an assessment of both qualitative and quantitative aspects of risk in a project through a structured framework

# Ratings Universe – who's who



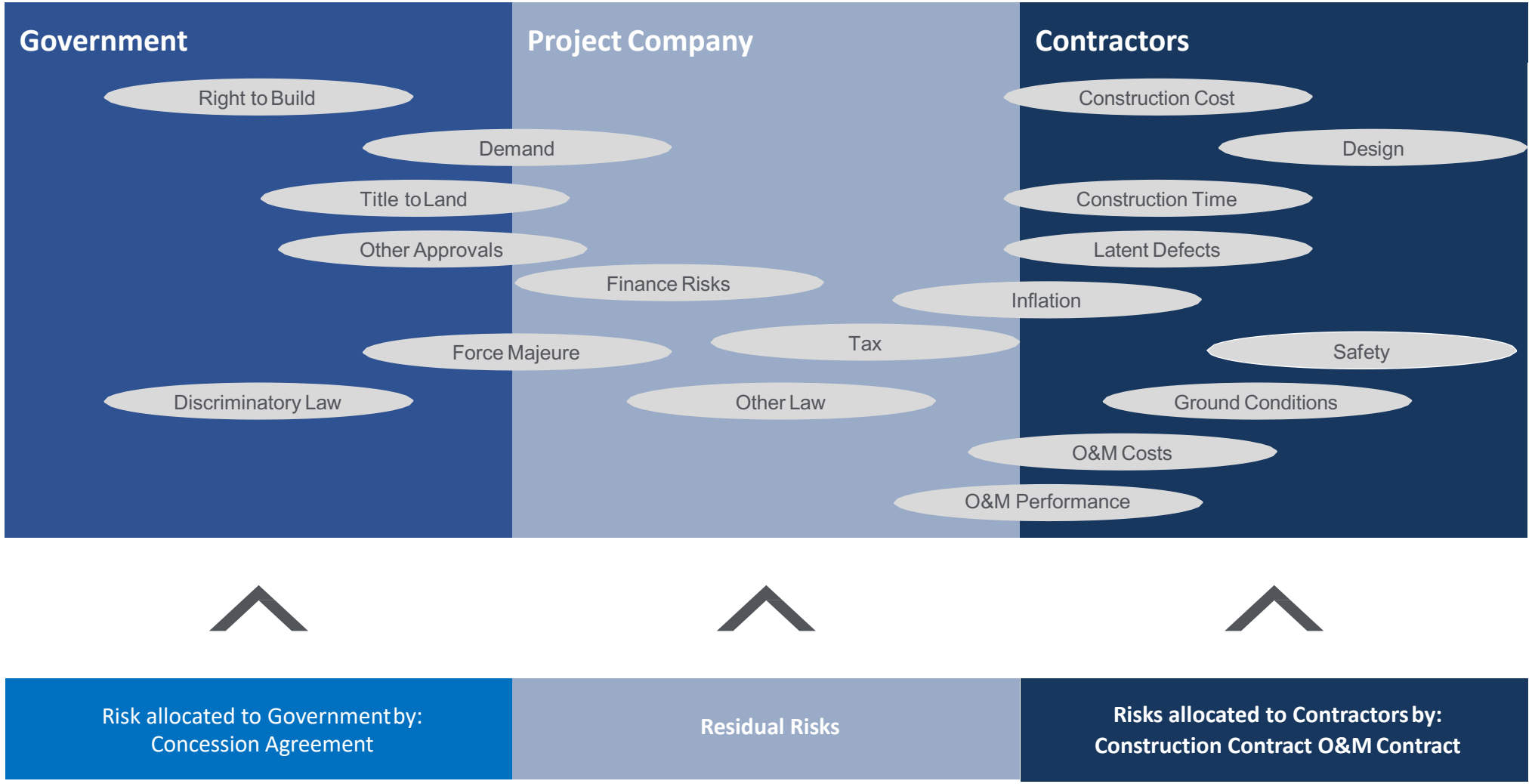
# Risks in Delivery of Projects

| | Risks | Main Mitigants |
|---|---|---|
| **Market Risk** | • Utilisation Risk<br>• Price risk | • Long-term Tolling Agreement(s) with<br>– Take-or-pay provisions covering fixed costs, including debt service<br>– Strong creditworthy experienced Tollers<br>– Mitigation of use-it-or-lose-it risk<br>• Market fundamentals<br>– Competitiveness of the project |
| **Political/Regulatory Risk** | • Unfavourable change in regulations<br>• Unfavourable change in law/taxes | • Regulator's track record<br>• Regulatory and Legislative framework stability |
| **Completion Risk** | • Site acquisition, permits/licences<br>• Construction costs overruns, delays<br>• Inadequate performance at completion<br>• Force Majeure<br>• Economic completion of the upstream and downstream supply chain | • Main permits/licenses already obtained for this Project<br>• Lump-sum turnkey EPC contract with<br>– Strong creditworthy and experienced EPC Contractor (Saipem)<br>– Appropriate LD levels<br>• Pre-Completion support<br>• Proven technology |

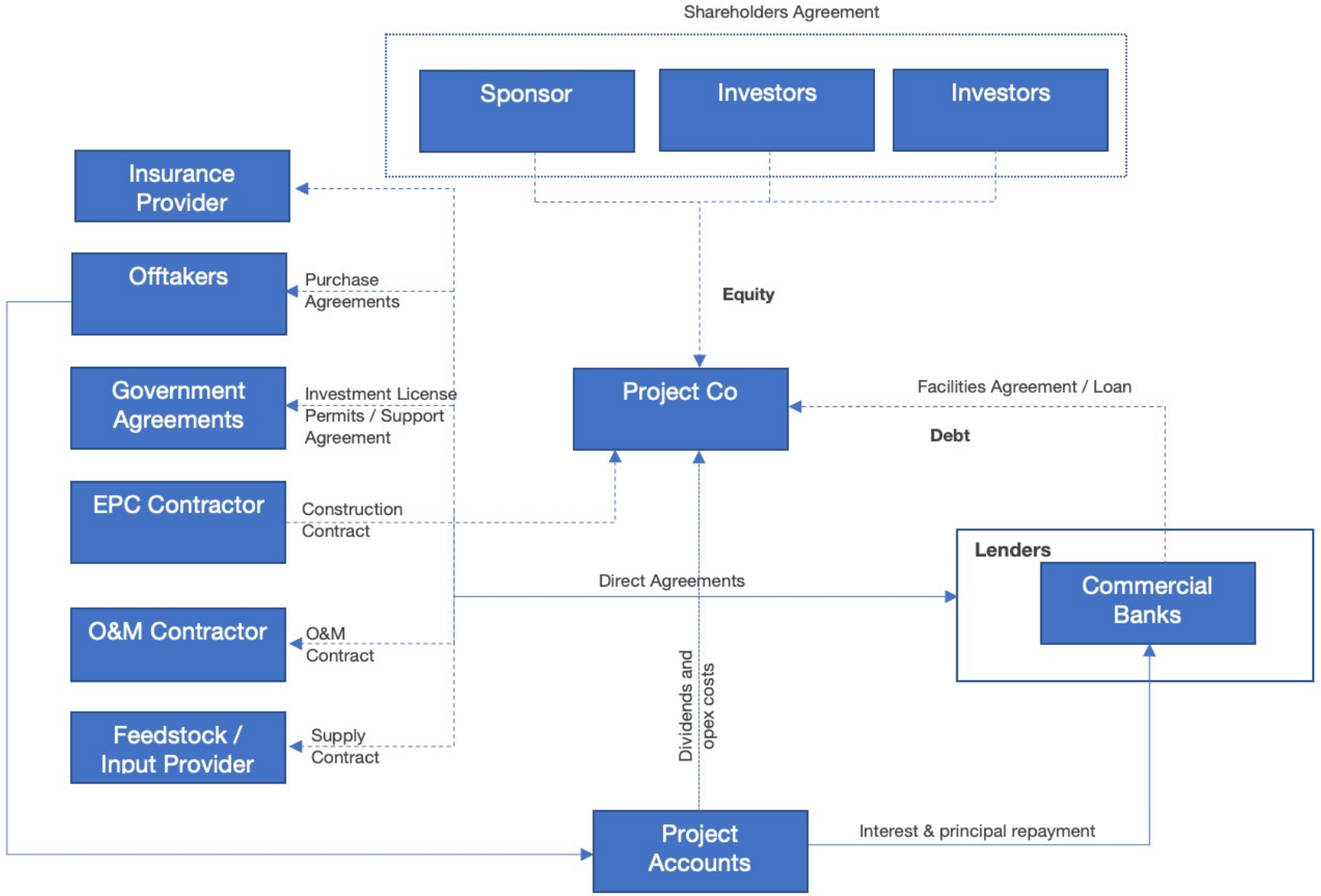
# Risks in Delivery of Projects

| | Risks | Main Mitigants |
|---|---|---|
| **Operation Risk** | • Operation and maintenance<br>• Cost overruns | • Long-term O&M agreement with experienced party<br>• Experienced secondees/staff within the Project Company<br>• Alignment of interest among Sponsors/Lenders |
| **Macro-economic Risk** | • Interest Rate, Exchange Rate<br>• Inflation | • Hedging<br>• Financing/Revenues/Cost matching<br>• Payments indexation mechanism |
| **Force Majeure** | • Natural FM (acts of God, etc.)<br>• Political FM (strikes, war, etc.) | • Insurance<br>• Political and regulatory stability |
| **Environmental and Social Impact** | • Human Rights ignored and loss of livelihood resulting in reputation risk<br>• Loss of vital habitat, for example water shed for clean drinking water die urban areas or loss of habitat for endangered migratory birds<br>• Negative impact on Climate Change | • Robust surveys to understand impact of project on society and / or habitat and amending design where possible.<br>• ensuring sufficient compensation is budgeted for to ensure livelihoods are not diminished by those impacted by the project<br>• Utilising different technology that has lower emissions |

# Allocation of Risk



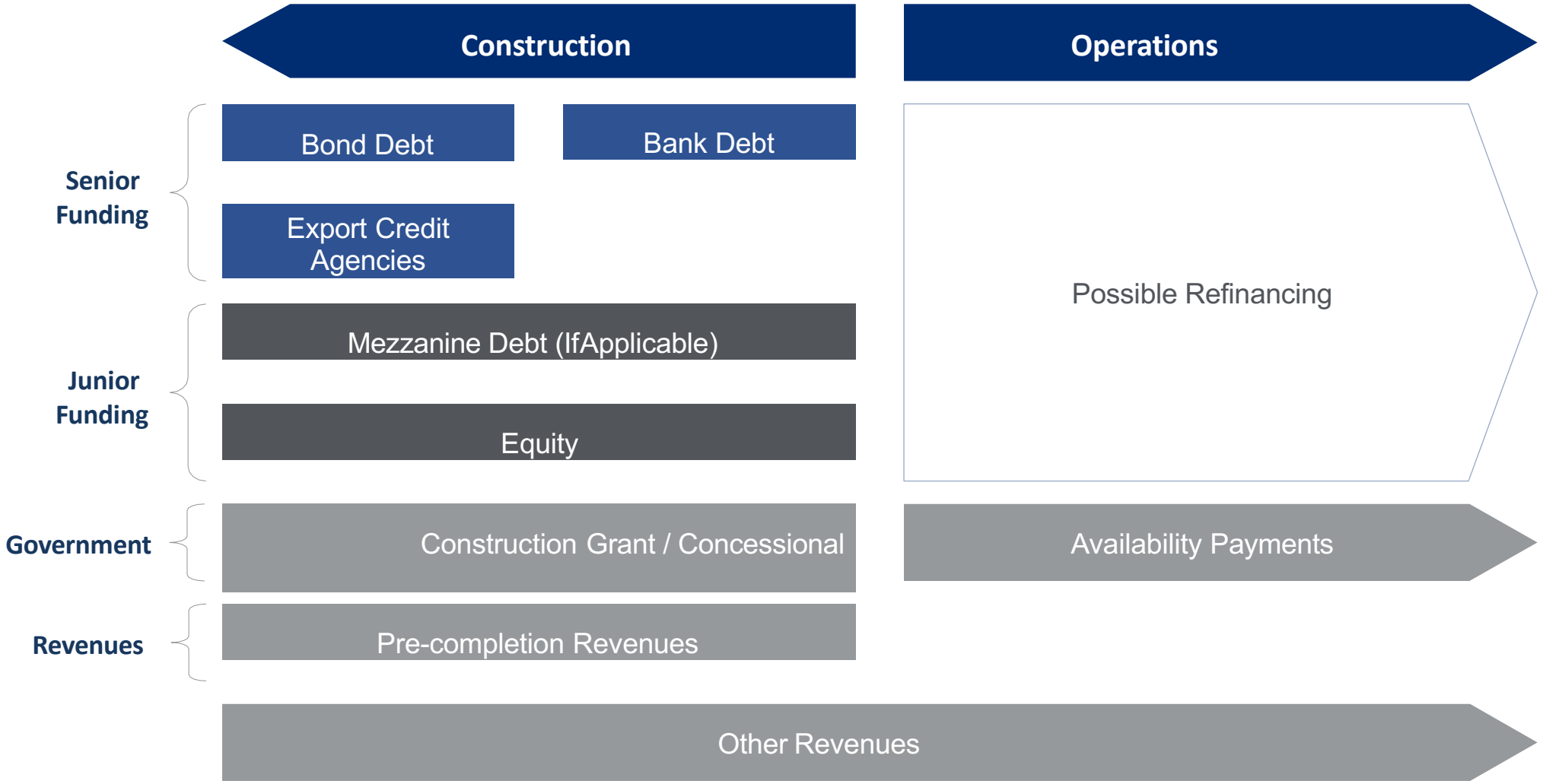
# Parties to a Project Finance Transaction




It is through the various project documents where the allocation of risk is embedded.

Therefore documentation is very important to financiers to ensure the allocation of risk is captured as intended and is legally valid.

# Types of Capital and Debt



# Keys to Project Success

**There must be a compelling need for the project and strong fundamentals. Predictable cost and secure demand are critical.**

- **Compelling need for project and strong fundamentals**
  - Credible consultants perform extensive due diligence and develop the finance structure – you want advisors who will tell you how to structure a project not ones that seek to tell you want you want to hear!
  - Particular scrutiny applied to any uncontrollable factors e.g. ultimate demand for the product
- **Proven technology**
  - Technical failure can severely delay completion
  - Problems during operation may cause significant financial damage
  - New technologies are not impossible to project finance but require far more due diligence
- **Supply agreement and cost competitiveness**
  - Low cost production particularly important if the project company takes demand risk
  - Successful projects are frequently regional monopolies/duopolies
  - Sponsors should be aware of other upcoming projects offering same service/product
- **Off-take agreement or attractive markets exist for product**
  - There is an established market or demonstrable future market for the product (assuming the project company will take demand risk)
  - The sponsors/off-takers should have strong channels to those markets as appropriate

# Key to Project Success cont.

**A credible operator of the asset is essential. Favourable environment and acceptable macroeconomics conditions play an important role.**

- **Sponsor group**
  - Clear alignment of interests
  - Mix of local and international players ideal
  - Adequate Return on Equity reflecting strong underlying economics
- **Realistic objectives**
  - Reliable contractor/operator
  - Experience of contractor/operator in similar projects – track record gives lenders comfort
  - Capacity and credit of contractor/operator – the contract should not be unduly large in relation to the contracting entities such that they may have difficulty paying liquidated damages if necessary and unable to raise other bonding securities
- **Acceptable sovereign risk**
  - Realistic attitude of government towards credit support if necessary
  - Political Risk Insurance (PRI) availability
  - Some countries may be more difficult due to unpredictable regimes or international economic sanctions
- **Mitigated currency and FX risks**
  - Appropriate hedging or swaps in place to protect lenders to changes in money market rates
- **Adequate insurance coverage**
  - Sufficient cover driven by due diligence and sensitivities
  - Limited exposure to un-insurable risks

# Reasons for Project Failure

**Political interference remains the dominant cause of project finance failure.**

## Projects can Fail Due to a Number of Key Reasons

- Government interference
- Delay in completion with consequential increase in capital costs and delay in expected revenue flow
- Capital cost overrun
- Technical failure
- Increased price or shortage of raw materials that were not hedged
- Loss of competitive position in the market place
- Decline in product demand and prices
- Poor management
- Uninsured losses

Wardour Africa

# Thank you

- Useful Links
  - UK Ghana Chamber of Commerce Website

- Contact steven.gray@wardourafrica.com